Amendments to the Claims:

1.   (Currently Amended) A method for verifying ~~reticle enhancement technique latent~~ post-optical proximity corrected mask wafer image sensitivity to ~~mask~~ reticle manufacturing errors, said method comprising: ~~revising a polygon based on mask CD distributions to provide~~ statistically modifying layout polygons based on reticle critical dimension specifications to construct a ~~virtual~~ statistical virtual mask; obtaining ~~response function statistical parameters based on the~~ virtual mask image response function statistical parameters; and comparing the statistical parameters to ~~design rule~~ process tolerance requirements.

2.   (Currently Amended) A method as recited in claim 1, further comprising forming ~~an~~ a simulated image of the statistical virtual mask.

3.   (Currently Amended) A method as recited in claim 2, further comprising calculating response functions based on the ~~aerial and/or latent image simulation~~ simulated image.

4.   (Currently Amended) A method as recited in claim 3, further comprising collecting ~~measurements~~ simulated image critical dimensions and calculating statistical parameters based on the response functions.

5.   (Currently Amended) A method as recited in claim 4, further comprising comparing ~~the statistical parameters with design rule~~ simulated wafer critical dimension distributions with process tolerance requirements.

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6.   (Currently Amended) A method as recited in claim 1, further comprising obtaining the statistical virtual mask by using ~~mask~~ reticle critical dimension ~~CD distribution~~ specifications to induce reticle manufacturing statistical variations to layouts which have passed through an ~~OPC~~ optical proximity correction procedure.

7.   (Currently Amended) A method as recited in claim 6, further comprising at least one of moving fragments of a polygon and re-sizing primitives of a post-optical proximity correction polygon.

8.   (Currently Amended) A method as recited in claim 6, further comprising moving fragments of a post-optical proximity correction polygon based on a randomly generated number from ~~mask CD distribution~~ a reticle critical dimension specification.

9.   (Currently Amended) A method as recited in claim 6, further comprising re-sizing primitives depending on ~~mask CD distribution~~ a reticle critical dimension specification.

10.   (Currently Amended) A yield prediction tool for mask quality specifications, said tool comprising means for ~~revising a polygon based on mask CD distributions to provide~~ statistically modifying layout polygons based on reticle critical dimension specifcations to construct a statistical virtual mask, means for obtaining ~~statistical parameters based on the~~ virtual mask imaging response function statistical parameters; and means for comparing the statistical response parameters to ~~design rule~~ process tolerance requirements.

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11.   (Currently Amended) A tool as recited in claim 10, further comprising means for simulating an aerial and/or latent image of the statistical formed virtual mask.

12.   (Original) A tool as recited in claim 11, further comprising means for calculating response functions based on the simulated image.

13.   (Currently Amended) A tool as recited in claim 12, further comprising means for collecting measurements simulated image critical dimensions and calculating statistical parameters based on the response functions.

14.   (Currently Amended) A tool as recited in claim 13, further comprising means for comparing the statistical parameters with design rule simulated wafer critical dimension distributions with process tolerance requirements.

15.   (Currently Amended) A tool as recited in claim 10, further comprising means for obtaining the statistical virtual mask by using mask riticle critical dimension CD distribution specifications to statistically vary layouts which have passed through an OPC optical proximity correction procedure.

16.   (Currently Amended) A tool as recited in claim 15, further comprising means for at least one of moving fragments of a polygon and re-sizing primitives of a post-optical proximity correction polygon.

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17.   (Currently Amended) A tool as recited in claim 15, further comprising means for moving fragments of a <u>post-optical proximity correction</u> polygon based on a randomly generated number from ~~mask CD distribution~~ <u>a reticle critical dimension specification</u>.

18.   (Currently Amended) A tool as recited in claim 15, further comprising means for re-sizing primitives depending on ~~mask CD distribution~~ <u>a reticle critical dimension specification</u>.

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